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ABSTRACT

During the 1976-77 school year, there were over 8,500 migrant students enrolled in the regular school program and 1,700 in the summer program. Students received academic, health, and nutritional services following the multiple-intervention strategy developed as part of the needs assessment. All projects developed a staff training program and conducted workshops during the year. Three-quarters of the projects established a Parent Advisory Council to provide local input and information to the program's operation. Over 600 students graduated either from elementary or secondary school. During the year, pre- and posttests were administered to the students for diagnostic, prescriptive, and evaluative purposes in the areas of reading, mathematics and oral language. Test results indicated that the greatest success was in oral language in which four of the five projects which pre- and posttested students showed a gain of one year or greater in terms of student achievement. This report presents information on the State's exemplary migrant projects, enrollment, program content, project staff, information dissemination, parental involvement, program coordination, and the program's quantitative and qualitative impacts. Data are also presented on a comparison of the 1974-75, 1975-76, and 1976-77 programs. Appended are the 1976-77 final report of the Arizona Migrant Child Education Laboratory, and the evaluations of the 5th Annual Follow-up Workshop and the summer 1977 Migrant Child Teacher and Aide Institute. (NQ)

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EVALUATION ANALYSIS REPORT FOR THE ARIZONA MIGRANT EDUCATION PROGRAM 1976 - 1977

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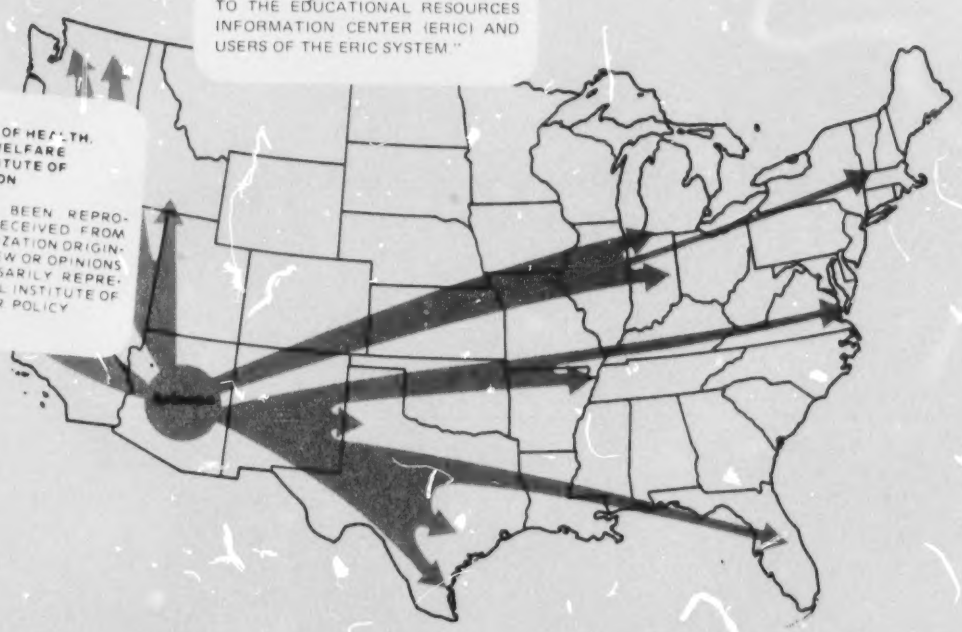

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CAROLYN WARNER, SUPERINTENDENT, ARIZONA DEPARTMENT OF EDUCATION

EVALUATION ANALYSIS REPORT

FOR THE

ARIZONA MIGRANT EDUCATION PROGRAM

1976-1977

J. O. Maynes, Jr., Ph.D., Director
Migrant Child Education

Carolyn Warner, Superintendent
Arizona Department of Education

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PREFACE

This report presents an analysis and summary of the evaluation reports of the Arizona migrant education projects during the regular school year 1976-1977 and the summer 1977 term. Contained in this report are basic statistics which document the extent of the quantitative and qualitative impacts which the Migrant Education Program has had throughout the state.

While a number of individuals provided of their time to bring this project to fruition, a special thanks must be extended to Dr. J. O. "Rocky" Maynes, Jr., and his staff for the ready provision of materials and their insightful analyses as the project progressed. In addition, thanks are extended to Dr. Frances Amabisca (Avondale District), Mr. Frank Celaya (Florence District), Mrs. Virginia McNeel (Tolleson District), and Mr. James Manship (Coolidge District). Each of these individuals and their colleagues assisted D. A. Lewis Associates in the validation portion of this evaluation study. Their assistance was of critical importance and was freely given.

B G Davis

Benjamin G. Davis
Project Director

RECOMMENDATIONS

HEALTH SERVICES

An increased effort must be put forth to provide follow-up health services for Arizona's migrant students. While once again, in 1976-1977, there was an increase in the number of screening examinations provided, there was for the first time in three years a decrease in the amount of follow-up that was done. Staff at the state level should move to strongly encourage project personnel to make provision for health services where special needs have been identified.

SECONDARY STUDENT ENROLLMENT

A greater effort must be put forward at identifying, recruiting, and retaining migrant secondary school students. During the past year, there was a decrease in migrant secondary school enrollment from the preceding year. While there was an increase in the number of migrant secondary school students who graduated, unless a major effort is made to reach those students who are not presently

SECONDARY STUDENT ENROLLMENT (CONT.)

participating, the opportunity to enhance the skills and abilities of migrant students prior to their entry in the world of work will be lost.

PARENT INVOLVEMENT

Continued efforts must be made to increase the level of parent involvement in migrant projects. It is obvious from the information reported that these efforts have been ongoing during the past years. This push should be continued until all projects have active, vital Parent Advisory Councils.

FOOD SERVICE

Greater efforts must be made to provide free or reduced-price lunches to all migrant students who are eligible. During the past year, approximately 73% of the migrant students enrolled in projects participated in the free lunch program. This percentage should be increased until all eligible students are having a portion of their nutritional needs met through the program.

TESTING PROCEDURES

Arizona Migrant Education Program personnel should encourage the use of a single or a limited number of tests for the reporting of cognitive gains. In the past year, over 15 different tests were utilized to evaluate student performance by projects. This range of tests makes it extremely difficult to perform interproject comparisons. If projects are encouraged to utilize a limited number of tests, it will be possible to begin to identify successful projects and their characteristics and to begin to replicate the successful projects throughout the state.

CONSULTANTS

State personnel should encourage the increased use of consultants by projects. Within the State of Arizona, there is a very valuable resource which has not been fully utilized by the Migrant Education Program. Through the consultant cadre and the Migrant Child Education Laboratory (AMCEL), there are a number of specialists whose services can be

CONSULTANTS (CONT.)

made available to migrant projects in areas of critical need. If greater use of these available resources was made, migrant student performance could be enhanced even more than is currently being done.

EXEMPLARY PROJECTS

Exemplary projects within the state should be documented. The Arizona Migrant Education Program has always been at the forefront in the development and use of innovative ideas and practices. In order to document and report to a national audience the innovations which have been successfully implemented, projects should be encouraged to collect background information, maintain ongoing process information, and collect impact data. If these items of information are assembled, it will be possible to more effectively publicize the results and to have the innovative practices recognized across the nation.

NEEDS ASSESSMENT IMPLEMENTATION

The Arizona Migrant Education Program should move actively to fully implement the findings and recommendations of the recently completed needs assessment. During the past year, a truly comprehensive and innovative needs assessment was performed for the Arizona Migrant Education Program. As a portion of that needs assessment, there was a time-phased, multiple-intervention strategy developed. This strategy should be implemented fully by the Program (with modifications made to meet any changing requirements) in order to help each migrant child to maximize his or her potential.

I

PARTICIPATION - NUMBER AND SERVICES PROVIDED

With the 1976-1977 school year, the Arizona Migrant Education Program entered its second decade of service to migrant students. This year saw continued growth in the number of students served, the amounts and types of services provided, and in the cognitive and affective gains of migrant pupils. Classified as a home base state (along with California, Florida, and Texas), students tend to participate in the Arizona Migrant Education Program for a significant portion of the year, leaving in the springtime with their parents to work in the fields and returning each fall to their place of residence. The Arizona Program, therefore, has a great opportunity to enhance the skills and abilities of the students with which it works. During the regular school year 1976-1977, over 8,500 migrant students participated in the Arizona Migrant Education Program as may be seen in Figure 1.

Figure 1

Number and Type of Migratory Children Served
Regular School Year 1976 — 1977

Type of Migrant Student	Educational Level			
	Kindergarten	Elementary	Secondary	Total
Interstate	403	2,940	355	3,698
Intrastate	224	1,525	103	1,852
Former (5 year)	126	2,418	464	3,008
Totals	753	6,883	922	8,558

The most predominant type of migrant student enrolled in the Arizona Migrant Education Program was the interstate migrant student. This group constituted 43% of the total enrollment in the program during the regular school year. A graphic display of program composition may be seen in Figure 2. This

Figure 2

Composition of Regular School Year Enrollment

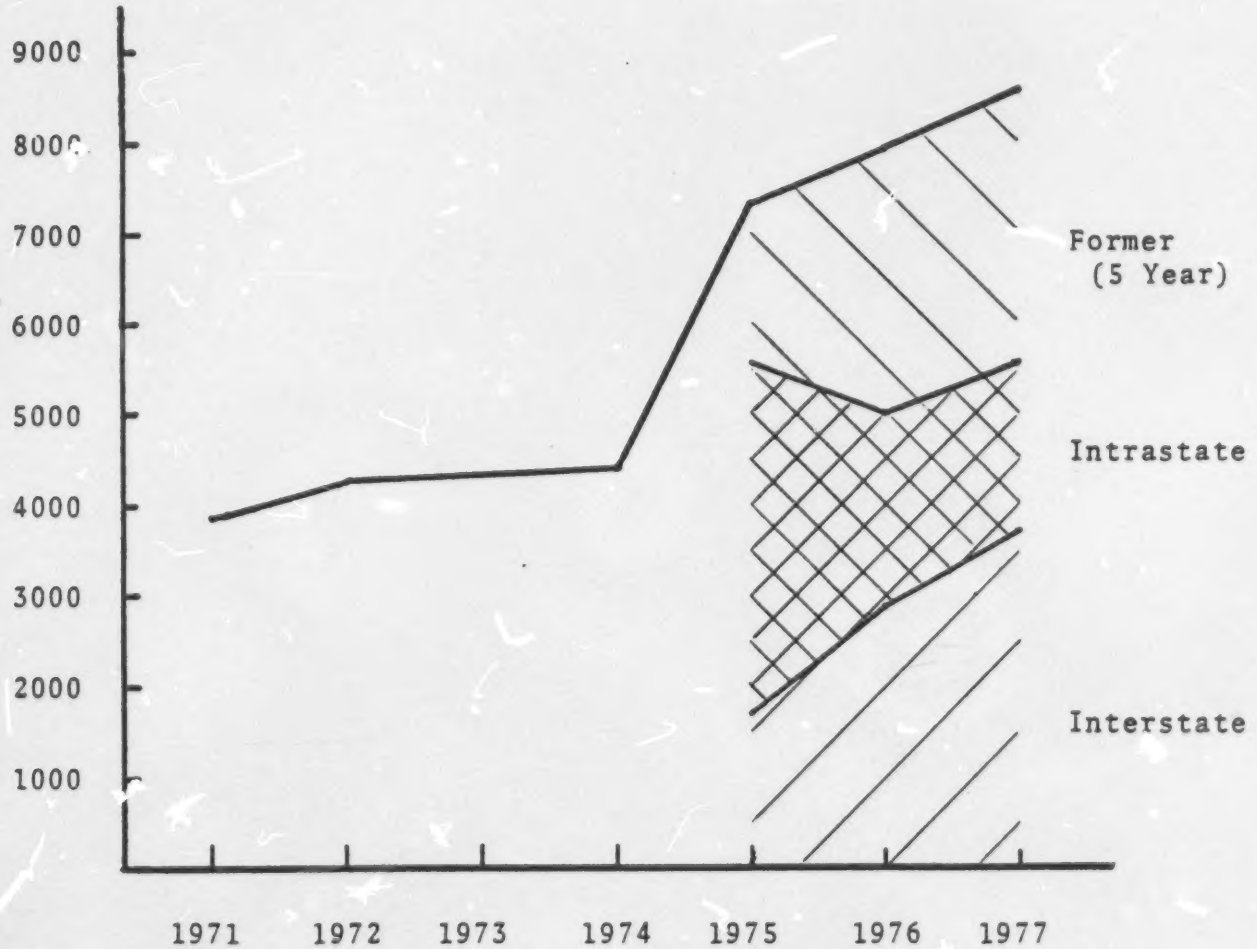

diagram indicates that the interstate migrant student population is not only the largest in absolute numbers but is increasing basically at the expense of the intrastate migrant student. By way of contrast, during the summer program in 1977, 44% of the pupils participating were classified as former migrants and 34% were interstate migrant students as may be seen in Figure 3.

Figure 3

Number and Type of Migratory Children Served
Summer Session 1977

Type of Migratory Student	Educational Level			
	Kindergarten	Elementary	Secondary	Total
Interstate	89	496	4	589
Intrastate	61	318	1	380
Former (5 year)	54	692	16	762
Totals	204	1,506	21	1,731

As with all statewide migrant programs, the predominant group of students participating in the program was at the elementary level. During the regular school year, approximately 80% of the students participating in the program were at the elementary level, while during the summer, approximately 87% were at this level. By way of comparison, the enrollment of students at the secondary level was relatively low. During the regular school year, only 11% of the students served were

at the secondary level, while during the summer, only 1% of the students were at this level. Obviously, if migrant students are to have an equal opportunity for success in the world which faces them, greater numbers must begin to participate in the Migrant Education Program. An intensive recruitment effort should be undertaken with a focus on secondary school students in order that the many available services can be provided to this group.

One of the major reasons for concern about the teenage migrant is that by not participating in the Migrant Education Program, they are not able to receive the broad cross-section of services that is available. The services that were provided during the past year by the Arizona Migrant Education Program may be seen in Figure 4. Following the multi-intervention strategy developed during the needs assessment conducted during the past year, services have been provided in academic, health, and nutritional areas. (In addition, services are provided in the areas of counseling, social development, career awareness, and self-concept.) Because of the broad range of needs displayed by migrant students, almost 100% of those participating in the program received a combination of academic, health, and nutritional services at some point during the year. As may be seen in Figure 4, one of the major emphases of the program is the development of reading skills. Approximately two-thirds of the students in the program received some special training in reading, training that

Figure 4

Services Received by Migrant Pupils
Regular School Year 1976 — 1977 & Summer Term 1977

	Pupils Served	
	Regular Year	Summer Term
Academic Services		
Readiness Skills		
Oral Language	3,466	1,036
Communication	1,005	14
Reading Skills	5,535	1,365
Computational Skills	2,864	859
Other	618	268
Health Services		
Examination and Screening		
Physical	2,296	365
Dental	2,938	716
Visual	4,887	469
Ear, Nose, and Throat	3,865	488
Other	1,865	508
Follow-up Services		
Physical	191	53
Dental	839	258
Visual	324	23
Ear, Nose, and Throat	160	18
Other	449	167
Nutritional Services		
Free Lunch	6,227	1,478
Reduced-Price Lunch	116	10
Breakfast	1,250	1,178
Morning Snack	307	331

went beyond that offered in the regular school programs. During the summer program, this percentage increases to approximately 80% of the students enrolled. This emphasis bodes well for the future of the migrant students enrolled in that, with the increased ability to read that will result, migrant students will be better able to work in all subject areas of their programs.

Further reference to Figure 4 indicates that a majority of the students received some health examination or screening services during the academic year. Where deficiencies were noted, students were referred for follow-up services, and the services were provided either through the program itself or through the use of local clinics.

The last major area of service provision is that of nutritional services. Approximately three-quarters of all students enrolled in the program received free lunch. Given that almost 100% of the students are eligible for participation in the free lunch program, greater efforts must be made to be certain that migrant students and their families avail themselves of the services that have been provided.

II

STAFF - TYPES AND TRAINING RECEIVED

Staff Types Employed

Migrant education projects, especially those conducted during the summer, are comprehensive in scope and designed to meet the broad range of needs displayed by migrant students. As such, a greater variety of staff persons is required than is typical in a supplementary education program. This diversity of staff type may be seen in Figure 5 which indicates the number of staff persons employed by migrant education projects

Figure 5

Number and Type of Staff Employed
Regular School Year 1976 — 1977 & Summer 1977

Staff Type	Number of Staff Employed (Full-Time Equivalent)	
	Regular School Year	Summer
Instructional Aide	241.0	122.5
Record Transfer Clerks	35.5	20.0
Certified Teacher or Specialist	22.5	117.5
Project Coordinator	12.9	12.5
Health Aide	12.5	4.0
Home-School Liaison	9.3	5.5
Other Aide	5.0	—
Nurse	4.0	11.5
Bus Driver	—	31.5
Cook	—	23.0
Cafeteria Personnel	—	20.0
Maintenance Personnel	—	16.5
Secretarial Support	3.0	7.5
All Other	17.0	23.5
Total	362.7	415.5

during both the regular school year and the summer programs. On a full-time equivalent basis, almost 800 staff persons were employed in the Arizona Migrant Education Program during the last year.

During the regular school year, approximately three-quarters of the staff persons involved with projects were either instructional aides or certified teachers or specialists. Given the underlying goal of providing supplementary services to meet the special educational needs of migrant children, this approach is in line with the State plan for migrant education. During the regular school year for each three instructional aides or certified teachers or specialists, there is one additional staff person employed by migrant projects. These staff persons run the gamut from record transfer clerks to project coordinators to a multitude of other staff types. Employment of these supportive personnel vary significantly from project to project dependent upon the specialized needs displayed by migrant students within that project's purview. This form of flexibility is absolutely essential if the Arizona Migrant Education Program is to continue to meet the special needs of migrant students.

The staffing patterns for the summer program which are displayed in Figure 5 are significantly different from those in the regular school year. As may be seen, the proportion of the staff which consists of instructional aides decreases significantly. A major portion of this decrease is taken up through the increased usage of certified teachers or specialists. Working with those

who are directly involved in classroom operations is a broad range of staff persons in over 15 different occupational groupings. The use of these non-classroom persons increases significantly during the summer program to the point where there are more than two support persons for each three classroom positions. The use of this broad cross-section of staff persons during the summer program has allowed migrant students to make significant strides at closing the gap between their present performance and their unique potentials.

Staff Training

With the complexity of needs displayed by migrant students and the ambitious goals undertaken by migrant projects, a comprehensive training program is essential if staff persons are to be able to respond effectively. During the past year, each of the projects in operation had developed and implemented a training plan designed around the project goals and the needs of project staff.

The major means through which training was provided to project staff persons was the use of specialized workshops in the areas of Instructional Services and the Migrant Student Record Transfer System. The number of workshops that were offered during the past school year may be seen in Figure 6. As may be seen, almost 300 workshops were offered in the area of improving the skills of teachers and aides in delivery of instructional services. While a majority of these were offered at the local level, a

Figure 6

Number and Type of Workshops Attended
Regular School Year 1976-1977

	Number of Workshops Attended	
	Instructional Services	Migrant Student Record Transfer System
Local	204	58
Statewide	59	40
Regional or National Level	28	6
Total	291	104

significant number of workshops were conducted at statewide or regional levels during the past year. A review of teacher and aide comments concerning the workshops indicates that the vast majority found the workshops to add significantly to their ability to meet the special needs of migrant students. In addition to the provision of instructional services workshops, there were 104 additional workshops designed to help teachers and aides to utilize the Migrant Student Record Transfer System (MSRTS) more effectively.

In addition to the 104 MSRTS workshops designed for teachers and aides, there were a number of special workshops designed for persons directly involved with the MSRTS as may be seen in Figure 7. This figure indicates that there were 33 special workshops designed for record transfer clerks, nurses, and terminal operators.

Figure 7

MSRTS Workshop Summary

Type of Workshop	Number Conducted	Number of Trainee Contacts				
		Total	Record Transfer Clerk	Nurse	Terminal Operator	Other
Statewide MSRTS Workshop	1	10	6	1	2	1
County MSRTS Workshop	2	28	22	—	3	3
Small Group MSRTS Workshop	14	97	59	4	21	13
Individual MSRTS Workshop at LEA	8	22	8	2	10	2
Individual MSRTS Workshop at Terminal Office	7	11	8	1	2	—
Other	1	3	1	—	1	1
TOTAL	33	171	104	8	39	20

These workshops were designed to help users to understand the accident insurance program, to learn the eligibility requirements and enrollment procedures, and to learn how to efficiently record and report data for use within the classroom situation.

As a part of the summer program, a specialized statewide instructional aides' workshop on manipulative materials was developed. Sponsored jointly by the Southwest Area Learning Resource Center, the Arizona Special Education Program (SELECT), the Arizona Migrant Child Education Laboratory (AMCEL), and the Arizona State University Reading Center, this workshop reached a total of 159 aides across the State as may be seen in Figure 8.

Figure 8

Manipulative Materials Workshop Participation

Total number enrolled	159
Number enrolled for college credit	30
Average number of games constructed	10
Number of hours attended	14

Designed as a statewide project, this workshop was conducted in three separate sessions in order to enable it to reach migrant aides from over 20 districts. The result of this workshop was the development of a number of educational games that could be utilized within the classroom situation. A summary of the aide evaluation of this workshop indicated that it was one of the best training experiences they had had during the past year.

An additional major area of training for Arizona's migrant teachers and aides consisted of the 8th Annual Migrant Child Teacher and Aide Institute and associated Follow-up Workshop. The Institute was conducted during a three-week period in the summer and has been held annually since 1970. Since its inception, over 200 teachers and 100 aides have participated in the program. The program is composed of two weeks of academic training followed by one week of experiential learning. The major goal of the Institute is to develop new methods and approaches that may be taken back to the teachers' classrooms on conclusion of the workshop. The Follow-up Workshop has been designed to provide summer participants with the opportunity to discuss the success of the innovative practices which they attempted to implement in their classrooms. The Follow-up Workshop, therefore, is designed to allow an interchange of ideas among teachers and aides from across the state. A full discussion of the evaluation of the Migrant Child Teacher and Aide Institute and the Follow-up Workshop is contained in Appendices B and C.

In addition to the training opportunities described above, a large number of other workshops and training programs were implemented by the Arizona Migrant Child Education Program during the past year. The Arizona Migrant Child Education Laboratory (AMCEL) provided direct assistance to a number of schools and teachers during the past year as is documented in Appendix A. Consultants in areas of special need were utilized by a number of school districts during the year with the consultants drawn

from the Arizona consultant cadre. Finally, a number of local and state level migrant education personnel were able to attend the series of workshops held at the National Migrant Education Conference.

III

PROGRAM COORDINATION

As was documented in the Migrant Child Needs Assessment completed for the Arizona Migrant Education Program during the past year, the range of needs of migrant students and their families is great. In that report, a multiple-intervention strategy was recommended which would seek to address in a coordinated, comprehensive way all of the needs that the children and their families display. If this is to be accomplished, a great deal of coordination needs to exist between the several programs that have been designed to provide services. This the Arizona Migrant Education Program has sought to do. Project directors across the state have affiliated their projects with over 40 other programs for the provision of services to migrant students. As can be seen in Figure 9, the programs

Figure 9

Interprogram Coordination
Regular School Year, 1976-1977

Program	Number of Projects Participating
National School Lunch	32
ESEA Title I	31
County Health Services	29
County Welfare Services	26
State-Funded Career Education Program	22
Migrant Opportunity Program	18
ESEA Title IV	16
Lion's Club	15
Arizona Migrant Child Educational Laboratory (AMCEL)	15
Arizona Department of Education (Consultant Cadre)	15

which do coordinate with migrant projects cover the broad spectrum of services that is necessary. The three programs with which the greatest amount of coordination exists cover the areas of nutrition, education, and health, three of the basic components that are essential for migrant student development. One encouraging factor that was noted in the evaluation of programs for the current year was that there had been an increase in the amount of interprogram coordination that was undertaken. An example of this may be seen in the fact that the first five programs listed in Figure 9 are the same as the first five programs from the previous year. In the current year, however, there was a 10.2% increase in the number of projects which were coordinating with these programs. The magnitude of this increase tended to be consistent throughout all projects.

Of equal importance to the coordination with other programs that occurs at the project level is the coordination which occurs at the state level. The basic intent of this coordination is to permit the exchange of information concerning new methodologies and approaches that have been successfully implemented in other states. A few examples of this type of coordination may be seen below:

- Membership in the Western States Coordinating Council for Migrant Education (WSCCME), a nine-state coalition designed to foster the exchange of information within the Western Stream.

- Participation on the Mathematics Skills Task Force and the Reading Skills Task Force. These Task Forces have been established to develop and implement a transmittal system by which specific skill information for migrant students may be transferred between schools as the student moves in the stream. As a part of the Math Skills Task Force, the state participated in the Pilot Test and Pilot Test Evaluation of the Math Skills Transmittal System during the past spring and summer.
- The provision of leadership and participation in the Oral Language Task Force. This Task Force is composed of members from six states whose goal it is to develop an Oral Language Skills Transmittal System similar to those which have been developed for reading and mathematics.
- Active coordination with the Education Commission of the States (ECS) in an attempt to focus national attention on the problems facing migrant farmworkers and their families and to share successful program ideas.

IV

PARENTAL INVOLVEMENT

A long-standing goal of the Arizona Migrant Education Program has been the direct involvement of parents in the education of their children. This has been fostered through the development of the Parent Advisory Councils, through direct contacts by staff persons with parents through the involvement in program activities, and through the provision of special training programs designed to meet the specific needs of parents. This involvement of parents has resulted in a two-fold benefit. First, the cognitive and affective development of migrant students has been enhanced through parent involvement, and, second, the skills and abilities of parents themselves have been augmented.

As a result of the known benefits to parental involvement in program and project activities, all project directors have made an effort to actively involve parents. As may be seen in Figure 10, almost half the project directors indicated that they

Figure 10

Extent of Parental Involvement
Regular School Year, 1976-1977

Extent of Involvement	Number of Projects
Excellent	6
Good	10
Fair	13
Poor	5

believed that the extent of parent involvement was either good or excellent. While it might be expected that project directors would exaggerate the extent of involvement of parents in their projects, this was found not to be the case. Where project directors indicated that parental involvement was excellent, it was found that there were a number of ongoing, indepth activities in which parents played an active role during the year. By the same token, project directors were willing to admit that, in some cases, parental involvement was not as good or as complete as they would have liked, and in these cases, directors had established plans for the improvement of parental involvement during the coming year.

One of the major ways in which parents may have a direct role in the migrant education projects is through participation in a Parent Advisory Council. As may be seen in Figure 11, 25 of the 34 operating projects had a Parent Advisory Council.

Figure 11

Number of Projects with Parent Advisory Councils

Parent Advisory Council Exists	Number of Projects
Yes	25
No	9

While on the surface, this may not appear to be a high percentage (73.5%), it should be noted that in the preceding year only 51.6% of projects had a Parent Advisory Council. In the year which preceded that, the figure was only 28.2%. These figures add statistical credence to the statements made by project and program staff concerning their desire to involve parents more directly in migrant education activities.

As an adjunct to (or perhaps as the cause of) the increased involvement of parents on advisory councils, there has been an increase in the amount of contact by project personnel with parents. In the past school year, there was an almost 30% increase in the types of contact which projects had with parents as may be seen in Figure 12. While personal contact between project

Figure 12

Method of Contact with Parents

Method of Contact	Number of Projects
Personal Contact	32
Survey	11
Other	14

personnel and parents remained the most frequently utilized method of contact, there were significant increases in the use of parent surveys and other mechanisms.

There are a number of ways in which parents may become involved in their children's education in addition to participation on a Parent Advisory Council. Figure 13 documents the activities for the past academic year. Again, there was an increase in the amount of activity of parents in the migrant education projects compared with the preceding year. While the

Figure 13

Activities in Which Parents Were Involved

Activity	Number of Projects
Parent-Teacher Conferences	28
Outside Classroom Activities	22
Health Program	14
Classroom Activities	13
Employed in Migrant Program	10
Other	9

most frequently utilized activity was the parent-teacher conference, it is significant that parents were involved in outside classroom activities in 65% of the projects during the past year and in the health program in 42% of the projects. What this indicates is that parents have become involved in a broad range of activities which will allow them to become better able to help their children to meet their potential.

V

DISSEMINATION

Local Projects

As an innovative and comprehensive approach to the remediation of deficiencies, the Migrant Education Program has generated many opportunities for students and their families. It is through dissemination of project information that the many available services become known to parents and the community at large. It is also through dissemination of information that other professionals become aware of new project approaches and can implement successful ones in their own projects. With this in mind, all migrant education projects had developed and implemented a comprehensive dissemination plan to make information available to interested parties in the field.

Details of the extent to which migrant education projects disseminated information may be seen in Figures 14 through 18.

Figure 14

Major Dissemination Methods Utilized to Reach Parents

Dissemination Method	Number of Projects
Parent-Teacher Conferences	28
Home Visits by School Personnel	25
Letters, Bulletins, etc. Sent Home	25
Parent Advisory Council Meetings	25
School Visits by Parents	24

Figure 15

Major Dissemination Methods Utilized
to Reach the General Community

Dissemination Method	Number of Projects
Newspaper Releases	20
Parent Advisory Council Meetings	18
Letters, Bulletins, etc. Sent Home	15
Special Meetings for Parents	12
School Visits by Parents	6

Figure 16

Major Dissemination Methods Utilized
to Reach School Personnel

Dissemination Method	Number of Projects
School Staff Meetings	33
Intra- and Inter-School Communications	23
Letters, Bulletins, etc. Sent Home	19
Parent-Teacher Conferences	16
Annual Evaluation Report	16

Figure 17

Major Dissemination Methods Utilized
To Reach the Arizona Department of Education

Dissemination Method	Number of Projects
Annual Evaluation Reports	25
Intra- and Inter-School Communication	7
Parent Advisory Council Meetings	7
Letters, Bulletins, etc. Sent Home	6
School Staff Meetings	5
Publications (Magazines, etc.)	5
Newspaper Releases	2

Figure 18

Major Dissemination Methods Utilized
To Reach Other Agencies

Dissemination Method	Number of Projects
Intra- and Inter-School Communication	4
Letters, Bulletins, etc. Sent Home	2
School Staff Meetings	1
Publications (Magazines, etc.)	1

Figure 14 indicates the methods which were utilized to reach parents. As may be seen, a large number of approaches were implemented by all projects. While parent-teacher conferences were the most frequently utilized, the next four approaches were implemented by an almost equal number of projects. In addition to addressing parents, all projects made an effort to reach the general community. The methods that were used for this may be seen in Figure 15. Figure 16 documents the approaches which were used to reach school personnel. This was an area of weakness identified in the previous year's evaluation report, and it is encouraging to note that there has been a significant increase in the number of contacts and outreach efforts made by migrant projects to disseminate information to other school personnel. This dissemination effort to education personnel does not stop with other school personnel, however, but has been carried to reach the Arizona Department of Education. Figure 17 indicates the major methods utilized in this with the Evaluation Report seen as the way in which project information was passed on to the Department of Education. In fact, there was a significantly higher amount of contact between projects and the Department of Education. Each project is monitored and reviewed by a migrant education consultant at least twice each year, and the consultants are on call and provide other assistance as needed. It is through these consultants that information is passed on concerning successful approaches and techniques, and a second project is able to benefit directly

from a first project's experience. Finally, as is seen in Figure 18, a few projects have implemented methods to reach other agencies. This aspect of the outreach effort should be increased such that individuals and groups across the state become sensitized to the special needs of migrant children.

Regional Film Libraries

An additional way in which both program coordination and information dissemination occur is through the use of the three regional film libraries which have been established as a part of the Migrant Education Program. Located in Dysart, Florence, and Somerton, these film libraries served a total of 23 school districts during the 1976-1977 school year. As Figure 19 indicates, a total of over 17,000 films were circulated during the

Figure 19

Film Dissemination

Film Library	Districts Served	Films Issued
Dysart	8	11,300
Florence	5	3,156
Somerton	10	3,026
Total	23	17,482

year. In fact, this number is an undercount in that teachers pass films on to other teachers and therefore double or perhaps triple the number of times the film is shown within a district.

State Level

The dissemination of migrant education information goes well beyond that which occurs because of projects and through the film library. The State Migrant Education Program has taken an active role in the dissemination of information both within the state and between states. The Migrant Child Teacher and Aide Workshop and the Follow-up Workshop both resulted in publications which described the activities which occurred during the workshop and provided those who were not able to participate with a description of some of the materials that were developed. Further, the state program has made available to projects packaged information such as a book of folk songs in Spanish which may be utilized both within the music programs and in the special programs that projects present for parents and the community, as well as other materials. Finally, The Migrant Educator (the national news publication for educators of migrant children) is distributed to all projects throughout the state in order that information about activities at the national level may be made available to all persons within the state.

VI

EXEMPLARY PROJECTS

The Migrant Education Program nationally has become known as an innovator and a producer of new ideas and approaches. Throughout its decade of service, the Arizona Program has been at the forefront of this innovative group, developing concepts and methods that have been new to the school districts, to the State, and to the nation as a whole.

The past year has again been productive for the introduction of new ideas into the Arizona Migrant Education Program. A number of projects developed innovative approaches and achieved substantial gains in student cognitive and affective behaviors as a result. A few of the Exemplary Projects for the 1976-1977 school year are presented below. In some cases, the ideas implemented were innovative to the district. In others, the ideas were adaptions of approaches that will be of importance across a much larger spectrum. In each case, the approach yielded an improved ability of migrant students to function successfully in the world around them.

Dysart Elementary

A cultural awareness program, sponsored by the district PAC members and Migrant Program, presented a play "The Miracle of the Roses." This was the first time this type of program had been done in English and Spanish. The history, language (Nahuatl),

music and color were displayed through ancient Aztec dances. Parents produced the props, scenery, costumes, flowers, decorations, music, roses, plants, art work and design of programs. A Mariachi band, whose members were parents and other people from the community, provided the audience with extra entertainment. Faculty members and students from all schools were involved in the different phases of the program. There were in excess of 500 people in attendance.

Eloy Elementary

Three basic exemplary features were included in this year's project. The first was the installation of the ICRT testing program. This program provided teachers and aides with firm instructional knowledge of the exact skills needs of each migrant student. Substantial criterion-checked knowledge gains were recorded by many migrant pupils as a result of this program. Several other districts have further used Eloy's experience in the decision to adopt this program for themselves.

The second exemplary feature of the program was the in-depth training provided for the aides and to a certain extent for the regular classroom teacher through the program. Approximately 50 hours of inservice training was provided for each aide covering the entire gamut of instructional topics. This led to noticeable increase in aide efficiency and effectiveness as verified by teacher comments and an objective aide evaluation system which was instituted concurrent with the inservice program.

This system yields an exact profile of aide strengths and weaknesses in all relevant areas. This knowledge was then used to target inservice and led to noticeable improvement in aide performance.

The final exemplary feature was the Title Newsletter which was published periodically during the year and was distributed in English and in Spanish editions to all migrant parents. This newsletter explained program features, general school programs, gave notice of upcoming events and included "learning tips" that the parents could use to help their children. It was well received by the parents.

Gadsden Elementary

Community involvement has been one of the most visible features of the project. The "Fiesta de las Flores" on May 1st was a perfect example of coöperation and interest in the education of the children in this community. More than a month was dedicated to preparation of dance numbers and songs in English and in Spanish. A queen contest was also one of the high points of involvement. Six candidates were chosen from the fifth and sixth grades. Parents and students from all grade levels had an opportunity to participate in a variety of activities which brought to the P.A.C. treasury $1,889.00. Half of the money was given to the manager of the Gadsden Little League to buy uniforms and equipment. Some money has been designated for the

purchase of material to make dresses for a singing group under the direction of two members of the classified school staff.

Murphy Elementary

Recognizing that for too long a communication problem existed between the school and migrant parents, the Murphy Elementary District implemented a special effort by the migrant staff to build a better understanding between the two parties.

Home visits became the main method of informing parents about program activities and their children's progress. While the concept of home visits by school staff is not unique, the extent to which it was carried made the program exemplary.

In preparation for parents' meetings, the usual notes went home but were followed up by telephone calls or personal invitations. If parents were unable to attend the function, home visits were conducted the following day to keep them informed.

In addition, one to three home visits were conducted with each family each month. These home visits had a positive effect on the parents, children, and paraprofessionals. Parents were at first surprised to find school people taking the time to visit with them. As more home visits were conducted, parents became more open to program staff. Questions were asked about social agencies, program insurance, and, most important, their children's school work.

The children thought it a special treat to have their teachers and aides visit with their families, giving them a feeling of

importance. The staff found it to be an enriching experience to see the children in their home environment in that it provided them with a better understanding of each child's self.

Because of the impact this program has had on school-community relations, it will be continued and expanded during the coming year to maintain the open lines of communication which now exist.

Somerton Elementary

In an effort to better meet the special needs of students with wide-ranging levels of both language development and academic achievement, two teachers of grades five and three teachers of grade six developed their own modification of the Joplin Reading Program. Levels were established, teaching objectives established, the program was activated, and it flourished. The teachers structured the program to permit students to "move up" as they achieved and the motivation effected was very useful. One teacher reports, "We felt this program was highly effective. As a large majority of students advanced very rapidly to grade level and beyond, the children were constantly stimulated by being allowed to advance to the next step as fast as they desired..."

Arizona Migrant Education Program

During the 1976-1977 school year, a path-breaking study was undertaken for the Arizona Migrant Education Program.

Designed as a comprehensive needs assessment for children of Arizona's migrant farmworkers, the study was innovative in that interstate student, worker, and program comparisons were made for the first time in migrant education.

Instructional and support needs were assessed by means of a battery of cognitive, affective, and psychomotor tests administered to about 700 migrant and nonmigrant students at ages 5, 7, 10, 13, and 16. Migratory population trends were analyzed by means of a predictive model, and the Migrant Family Program-Impact Analysis employed the technique of content analysis of objectives statements and other program documents and of interviews with administrators and others in contact with public programs affecting migrant families. In order to place all information in the proper context, a Delphi study was conducted to assess potential future directions for programs that affect migrant farmworkers.

In addition to the documentation of specific needs, this assessment resulted in the development of a multiple-intervention action plan for addressing the problem areas identified and for meeting the special needs of migrant students in Arizona.

VII

PROGRAM IMPACTS - QUANTITATIVE AND QUALITATIVE

Quantitative Impacts

As a part of the preceding chapters of this evaluation, a number of statistics have been presented concerning the quantitative impacts that the Arizona Migrant Education Program has had during the 1976-1977 school year. To summarize briefly, it is important to be aware that —

- Over 8,500 students participated in the Arizona Migrant Education Program during the regular school year with an additional 1,700 participating during the summer program.
- A comprehensive package of program services was made available to each student following the multiple-intervention strategy developed as a part of the needs assessment.
- The health examination and screening services of the migrant project reached virtually every participating student.
- Over three-quarters of the students who participated in the program were also involved in the food service program.
- Almost 800 full-time equivalent staff persons were involved in project activities during the regular school year and the summer programs.

- All projects had developed a staff training program and approximately 400 workshops were conducted during the regular school year as a part of this program.
- Three-quarters of the projects had established a Parent Advisory Council to provide input and information to the operation of the program at the local level.

Another approach to measuring the quantitative impact of the Migrant Education Program during the past school year is to review the number of migrant students who were able to graduate either from elementary or secondary school. The number of graduates is documented in Figure 20. As may be seen, over 600 students graduated from school during the past year, a 50% increase over the preceding year.

Figure 20

Migrant Student Graduates
Regular School Year 1976-1977

Level	Number
Elementary	525
Secondary	108
Total	633

Qualitative Impacts

As a part of each project evaluation for the year, data were submitted concerning the achievements made by pupils, with that achievement measured by standardized tests. While there are many concerns with the use of standardized tests for the measurement of pupil achievement, they do, nonetheless, provide a common measure and allow evaluators to develop an understanding of some of the aspects of project success. During the past year, therefore, all projects performed pre- and post-tests on the students that were enrolled for diagnostic, prescriptive, and evaluative purposes. A summary of the test score results may be seen in Figures 21 and 22. It is essential to be aware when reviewing Figures 21 and 22 that interproject comparisons should be made only with a great deal of caution. One of the reasons for this is that there was no specific standard test required to be utilized by migrant education projects, resulting in the use of 15 separate tests for the evaluation of reading, 9 for mathematics, and 5 for oral language. A further complication results from the fact that the tests were not given on the same days and, thus, may report gains made over different time periods. If these cautions are taken into account, however, data may be utilized for an evaluation of project performance.

Of the 23 elementary projects which reported information on reading scores, six were able to achieve at least a one-year average gain for those students that were both pre- and post-tested. A gain of this magnitude on the part of migrant students

Figure 21

Growth in Cognitive Skills by Elementary Level
Migrant Students during the Regular School Year, 1976-1977
Grade Equivalent Gains (Number of Students)

School	Skill Area		
	Reading	Mathematics	Oral Language
2	0.99 (87)		
3	0.57 (149)	0.41 (146)	
4	0.79 (178)	0.96 (192)	
5	0.84 (66)		
6	0.84 (191)	1.15 (191)	1.26 (191)
8	0.77 (21)		
9	0.78 (141)		
12	1.18 (83)		1.19 (81)
13	1.42 (62)	0.91 (76)	
14	1.26 (105)	0.54 (79)	
15	1.20 (46)	1.38 (20)	
16	0.64 (230)	0.65 (229)	
17	1.24 (61)	1.64 (24)	
18	0.73 (62)		1.00 (74)
19	0.82 (62)	0.73 (58)	
21	0.91 (83)		
23	0.58 (66)	0.71 (65)	
24		0.64 (57)	1.21 (87)
25	0.63 (26)		
28	0.50 (68)	0.62 (84)	
29	0.97 (62)		
31	0.95 (113)	0.79 (116)	
32	1.01 (33)		0.34 (19)
33	0.38 (32)		

Figure 22

Growth in Cognitive Skills by Secondary Level
Migrant Students during the Regular School Year, 1976-1977
Grade Equivalent Gains (Number of Students)

School	Skill Area		
	Reading	Mathematics	Other
1	0.04 (107)		
5	1.97 (12)		
7	1.18 (114)		
21	1.20 (1)		
22	0.60 (12)	1.60 (9)	0.80 (7)*
26	1.94 (11)	2.50 (2)	
29	1.07 (18)		
32	1.30 (23)		0.30 (2)**

* English-Writing
** Oral Language

is a substantial one given the many significant disadvantages with which they are forced to work. The area in which the greatest success appears to have been made is that of oral language in which four of the five projects which pre- and post-tested students showed a gain of one year or greater in terms of student achievement.

As with the data reported in last year's evaluation, students enrolled in secondary school projects appeared to make greater gains than was the case for elementary school pupils. Six of the eight high school projects reporting data indicated that student achievement exceed a one-year gain in ability.

A similar case may be seen in mathematics where both projects which pre- and post-tested students exceeded a one-year gain. This high level of achievement that has been made on the part of high school students is a good indication that, on graduation, students will be able to function well within the world which they will face.

Correlates of Success

As part of the program evaluation for the 1976-1977 school year, separate evaluation was made of those projects which appeared to achieve the highest levels of success with students. As was determined in the preceding year's evaluation, the usual measures which are utilized to measure project inputs appear not to be correlated with project success. Project size, student-staff ratios, percent of professional versus paraprofessional staff, and many other variables, appear not to have a positive correlation with student achievement. What has been determined is that projects appear to be most successful which have a high level of inservice activities which make teachers better able to meet the needs of migrant students, an increasing level of involvement of parents in the educational process of students, a relatively low turn-over rate among instructional aides, and an active cooperative relationship between project administration and project staff persons.

VIII

PROGRAM COMPARISONS:
1976-1977, 1975-1976, and 1974-1975

As has been discussed previously, the Arizona Migrant Education Program has experienced a continued growth throughout its decade of service. In the past year, the number of pupils served increased by 7.2% over the preceding year (following a 7.4% increase from the year previous to that). The areas of increase may be seen in Figure 23. This figure

Figure 23

Program Enrollment - Regular School Year

Student Classification	Pupils Served		
	1976-1977	1975-1976	1974-1975
Grade Level			
Kindergarten	753	589	873
Elementary	6,883	6,427	5,859
Secondary	922	966	697
Total	8,558	7,982	7,429
Migrant Status			
Interstate	3,698	2,869	1,796
Intrastate	1,852	2,127	3,883
Former (5 Year)	3,008	2,986	1,750
Total	8,558	7,982	7,429

indicates that elementary school enrollments have increased steadily over the past three years, while kindergarten and

secondary school enrollments have fluctuated somewhat. In fact, during the past year, there was a decrease in secondary school enrollment in the Migrant Education Program. In terms of migrant status, the interstate migrant students have continued to increase over the past three years while intrastate migrants have decreased. After a substantial increase between the 1974-1975 and 1975-1976 school years, former (5-year settled-out) migrant student growth has leveled off such that approximately 35% of all students served are of this category.

As has been described previously, a broad range of services are made available to migrant students throughout the academic year. Because of the change in the reporting format of the evaluation instrument, only two direct comparisons may be made between the services offered during the current year and those provided a year earlier. As may be seen in Figure 24, there

Figure 24

Academic Services Provided — Regular School Year

Academic Services	Pupils Served	
	1976-1977	1975-1976
Reading Skills	5,535	3,755
Computational Skills	2,864	3,227

was a significant increase in the number of students who received specialized assistance with reading skills development.

At present, approximately 65% of all migrant students receive special reading instruction as compared with 47% in the previous year. The area of computational skills does not fare as well, however, recording an actual decrease of 11% in the number of students served. During the summer programs, there was a significant increase in the emphasis on reading and computational skills with an 87% increase in reading enrollments and a 139% increase in computational skills enrollments.

As with academic service provision, the review of health services presented in Figure 25 shows mixed results. While there was a 3% increase in the number of screening examinations provided, there was a significant decrease in the number of follow-up services provided to migrant students. Given the extent of special health needs possessed by migrant students (and documented in the recently completed needs assessment for the Arizona Migrant Education Program), it would appear likely that there are some as yet unmet needs which should be addressed by the Migrant Education Program.

The past program year was one of significant change in the staffing of summer projects. While some of this increase was due to a revision in the reporting requirements, it is still important to be aware that the pupil-staff ratio during summer programs decreased significantly. Changes during the regular school year were much less dramatic. While there was an 8.7% increase in the number of staff persons employed by projects, given the increase in number of students enrolled, the student-

Figure 25

Health Services - Regular School Year

Services Received	Pupils Served		
	1976-1977	1975-1976	1974-1975
Examination and Screening			
Physical	2,296	2,116	2,471
Dental	2,938	2,523	2,830
Visual	4,887	4,366	2,593
Ear, Nose, and Throat	1,865	2,627	2,538
Total	11,986	11,632	10,432
Follow-up Services			
Physical	191	521	82
Dental	839	978	321
Visual	324	449	95
Ear, Nose, and Throat	160	443	75
Total	1,514	2,391	573

staff ratio decreased only marginally from 23.93 to 23.60. Accompanying the increased staff employment by migrant projects was an almost 20% increase in the number of specialized training workshops held to improve the skills and abilities of teachers and aides.

Parental involvement was another area of major change for the Arizona Migrant Education Program during the past school year. While approximately three-quarters of the projects had active Parent Advisory Councils in the past year, in the preceding year only one-half of the projects had Parent Advisory Councils with that number decreasing to one-quarter in the year prior to that. This increase in the use of Parent Advisory Councils, coupled with the increase in the number of activities in which parents were involved (approximately 7%), led to an increase from 38% to 47% in the number of project directors who indicated that the extent of parental involvement during the regular school year was either good or excellent.

The final area in interyear program comparisons that were made is documented in Figure 26. As is indicated, there was a

Figure 26

Migrant Student Graduates

Level	Number	
	1976-1977	1975-1976
Elementary	525	328
Secondary	108	95
Total	633	423

50% increase in the number of migrant students who graduated from school during the past year. This increase is highly encouraging and speaks well of the increasing ability of the Migrant Education Program to attract and retain students, providing them with an opportunity to maximize their potential and to be equipped to deal successfully with the world.

APPENDIX A

ARIZONA MIGRANT CHILD EDUCATION LABORATORY

FINAL REPORT

1976-77

Nicholas J. Silvaroli, Ed.D.
Director

ARIZONA MIGRANT CHILD EDUCATION LABORATORY

(AMCEL)

The Arizona Migrant Child Educational Laboratory was established to provide supportive educational services to those schools qualifying for Migrant Education Program funds. In the past year, services were offered in two ways: provision of an outside consultant who developed resource and instructional materials and provision of direct inservice programs to teacher aides. Dr. Silvaroli coordinated all services in the AMCEL Program.

The AMCEL services related to the development of resource and instructional materials were provided by Dr. Warren H. Wheelock, who wrote the initial sections of two AMCEL publications (Resource Units K-3 and 4-8). In addition, Dr. Wheelock modified several decoding and comprehension materials used in the Migrant Education Program in the State.

The AMCEL services related to direct inservice programs were provided by Sister Noreena Carr and Ms. Carol Spencer.

In addition to individual meetings and phone conferences, services provided to schools were presented mainly in a workshop format. The content of the workshops offered during the past year may be seen below.

1. Introduction to Reading. The complexity of the English language and its effect on the student learning to read was demonstrated. Use of a symbol to be recalled and written from visual

memory as well as the Primer for Parents book which uses another symbol system for reading gave the tutors an experience similar to that undergone by beginning readers. This was followed by a discussion of "readiness" and a review of readiness exercises and their use in determining whether a child is ready to read.

2. Oral Language Assessment. The OLÉ and Monroe tests were presented and assessed as a means to determine whether the child is ready for a reading program.

3. Classroom Reading Inventory. The CRI was demonstrated and assessed for determining individual strengths and weaknesses, and tutors were given the opportunity to administer the test through the use of tapes. This test was then analyzed by the group to determine the needs of the child being tested.

4. Lesson Planning. This procedure was outlined stressing the importance of using multiple means to determine the planning and structuring of lessons to meet the needs of the student. Tutors were given sample lesson plan formats to inspect and were given a model to use for themselves.

5. Teacher/Tutor Aide Relationships. Role expectations were outlined and some of the problems relating to this area were analyzed.

6. Motivation. The importance of self-concept and positive reinforcement were discussed and some of the behavior modification techniques that can be used to encourage students were demonstrated. Tutors were encouraged to use techniques for instruction unrelated to classroom procedures to encourage motivation.

7. Films. Films that demonstrated the use of context clues ("Reading for Beginners: Using Context Clues") and word identification techniques ("Reading for Beginners: Words and Word Parts") from the Arizona State University film library were used to provide teachers with new skills in the teaching of reading.

8. Approaches to Reading. The importance of oral language development in teaching reading and how it may be approached were demonstrated. Language Experience and the Phonics Approach and their uses were also taught. The structure of phonics as outlined in most basic readers as well as a general overview of phonics instruction and comprehension skills needed in a developmental sequence were taught using a variety of approaches.

9. Readability. The Fry readability formula was taught and used during the workshop.

10. Interest and Attitude Inventories. The Snoopy Attitude Inventory and an Interest Inventory were demonstrated and discussed to enable tutors to determine instructional interests and the kinds of materials to use in planning for the student.

11. Comprehension and Questioning Techniques. The importance of teaching comprehension and the use of questioning in so doing were taught and discussed by the group. The use of REQUEST was demonstrated. Handouts of Clymer's Utility of Forty-Five Phonic Generalizations and Burmeister's Usefulness of Phonic Generalizations were discussed in each workshop.

12. Games and Activities. Teacher or aide constructed games were demonstrated in relation to their effectiveness in reinforcing the skill to be taught. Games utilized covered readiness, beginning skills, and comprehension skills. Functional folders were demonstrated and their use in tutoring was stressed. The importance of format, including modality, color, etc., were discussed to encourage flexibility in designing games. Instructions relating to the construction of the games were given. Resources available for planning activities and games relating to the various reading skills were provided.

13. Minimum Objectives for Teaching Basic Skills In: Communications, Reading and Mathematics. The use of this book was demonstrated to assist tutors in determining the skills needed by individual students as well to aid in the planning for the mastery of them.

14. Handbook for Tutors. This handbook was distributed at each workshop and tutors were given the opportunity to learn how it could be effectively utilized in direct interaction with students.

EVALUATION

The goal of the AMCEL program this year was the enrichment of the teaching skills in reading for the instructional aides employed in the Migrant Program. To meet this end, services offered assumed the form of workshops. Districts grouped together

to take advantage of extended sessions. The majority of these workshops offered from twelve to fifteen hours of skill development in reading.

As the year progressed, there was an increase of requests for such service. The demand was of such a number that some districts could not be served and were assured of first preference next year.

Significant among the areas most appreciated were those of Oral Language Development and use of the Classroom Reading Inventory, Motivational Techniques, Manipulative Devices and Activities for Teaching Reading. Aides evidenced a need for better teacher-aide relationship development and for assistance in specific planning for the students assigned to them. There was also definite indication of need for instructional aides to have individualized help on specific problems.

New approaches and offerings of the AMCEL Workshops this past year included a team-teaching approach by Ms. Carol Spencer and Sister Noreena Carr. This not only provided for a richer curriculum but allowed for small group sessions of upper and lower teaching levels.

Credit was also offered to participants through the Arizona State University Extension Services. One hour credit in RDG 494 was earned by 13 instructional aides and teachers who took advantage of this opportunity.

Attendance by the consultants at the Workshop sponsored by the Southwest Regional Classroom Teachers Organization in Las Cruces, New Mexico, expanded their offerings in the area of games

and manipulative devices for teaching reading. These were found to be in great demand since they allow the instructional aides to provide the necessary drill in reading skills in a way which is varied from the usual classroom procedures. As a result of the attendance at the above institute and the increase in demands from instructional aides, tentative arrangements have been made for three two-day workshops for teachers and instructional aides on manipulative devices for teaching reading. These are scheduled for the Fall 1977 through the cooperation of AMCEL, SELECT (Special Education Learning Experiences for Competency in Teaching) and the Southwest Regional Learning Resource Center. Administrators contacted were exceptionally responsive to the possibility of such a program.

The Right to Read Tutor Handbooks were reproduced and distributed to all instructional aides. These books were used as a directional guide for each workshop and as modeling devices for instructional aides.

Films on reading from the ASU film library were utilized to broaden the scope of the instructional aides regarding reading techniques.

It was felt that a primary need in the program is, once having expanded the teaching skills of the instructional aides, an awareness of the aides' new abilities on the part of teachers and administrators to assure effective utilization. To this end, AMCEL certificates were awarded to those aides who had completed at least 12 hours of instruction. These certificates were sent

to the district administrators along with a letter indicating specific reading skills covered in the workshop sessions. In addition, a news release on the workshops, listing the participants, was sent to the local newspaper in each area.

Figure #1 is a representation of the services provided and areas served.

The increase of requests for workshops and the letters of appreciation received gave evidence that the services provided by AMCEL consultants were definitely appreciated. Significant, but not indicated, was the fact that responses tended to become more highly positive where greater assistance was given in oral language, motivational techniques and manipulative devices.

The appreciation manifested by the aides and the concern evidenced by their attention and their questions were encouraging signs of their commitment and of the effectiveness of AMCEL's programs in reading.

Figure #1

SERVICES	DISTRICTS						
	Maricopa Special Services Consortium	Avon Avondale	Casa Grande Eloy	Murphy School District	Yuma Gadsden	Parker	Tolleson
I. Role of Instructional Aide	X	X	X	X	X		X
II. Oral Language							
A. Acquisition	X	X	X	X	X	X	X
B. Development	X	X	X	X	X	X	X
C. Dialectic Influences	X	X	X	X	X	X	X
D. Diagnosis	X	X	X	X	X	X	X
III. Reading							
A. Nature of Reading Act	X	X	X	X	X	X	
B. Teaching of Reading	X	X	X	X	X	X	
C. Decoding	X	X	X	X	X	X	
D. Comprehension	X		X	X	X	X	
IV. Diagnosis (Reading)							
A. Formal	X		X	X	X		
B. Informal	X	X	X	X	X	X	
V. Prescriptive Reading							
A. Individualizing	X	X	X	X	X	X	X
B. Planning	X	X	X	X	X	X	X
C. Motivational Techniques	X	X	X	X	X	X	X
D. Interest Inventory	X	X	X	X	X	X	
VI. Grouping Procedures	X		X	X	X	X	X
VII. Manipulative Devices for Teaching Reading	X		X	X	X	X	X
VIII. Program Development							
A. Credit (RDG 494)	X		X		X		
B. AMCEL Certificates	X		X	X	X		
C. Communication with District Administration	X		X	X	X		
D. Newspaper Coverage	X		X	X	X		
IX. Consultation outside of Wksp							2 hr.
X. No. of Hours of Instruction	15	4	15	15	12	4	6
XI. Phone Contacts	6	3	5	5	6	6	6
XII. No. of Participants (177)	35	39	28	6	16	15	38

RECOMMENDATIONS

1. Scheduling for AMCEL services should be completed as early as possible in the academic year.

2. Regional administrators should be informed as to the specific offerings available through AMCEL consultants.

3. Records should be maintained indicating the particular areas of instruction previously offered to the instructional aides in an area, and consultants should be presented with a list of immediate needs indicated by the aides. Such a plan would allow for better planning and greater efficiency, effectiveness, and enthusiasm.

4. Since teachers and instructional aides have indicated a strong interest in developing manipulative devices for reading instruction, such workshops should be given definite consideration.

5. There appears to be a universal need for opening communications for planning between teachers and instructional aides. This is an area to be investigated.

APPENDIX B

EVALUATION

5TH ANNUAL FOLLOW-UP WORKSHOP

PHOENIX, ARIZONA

MARCH 18, 1977

State Superintendent
Carolyn Warner

Director, Migrant Child Education
Dr. J. O. "Rocky" Maynes, Jr.

Director, AMCEL
Dr. N. J. Silvaroli

INTRODUCTION

Migrant Education Follow-up Workshops are designed to provide administrators, teachers, and aides with an opportunity to share, evaluate, and discuss the instructional concepts and techniques which were introduced to participants during the three-week Annual Migrant Summer Institute. The 161 participants who attended this Follow-up Workshop had previously attended one of the three-week Summer Institutes.

The Follow-up Workshop is only one aspect of the overall integrated In-Service Program provided by Arizona's Migrant Child Division.

The overall program begins with a three-week Summer Institute for administrators, teachers, and aides. The Institute is both campus and field based. The Institute is followed by the availability of AMCEL (Arizona Migrant Child Education Laboratory) consultants to help Institute participants implement instructional practices in schools during the academic year. Throughout all phases of this integrated program, three instructional areas were emphasized:

Oral Language Development
Reading Development
Mathematics Development

The following local coordinators served as discussion leaders and arranged for fellow teachers and aides to make presentations:

Mrs. Maria A. Caiazzo - Somerton

Mr. Scott A. Mundell - Eloy

Mrs. Jan Perkins - Dysart

Mrs. Joyce Seriale - Mohawk Valley

One hour of this program was in a lecture format during which Dr. Silvaroli discussed the units which were prepared by previous Institute participants and the 2nd edition of an oral language measure, entitled OLÉ. The balance of the program consisted of teachers and aides sharing specific materials, instructional practices, ideas, etc., with each other.

EVALUATION

A total of 161 participants attended this one-day Follow-up Workshop. The roles of the participants were as follows:

Administrators		16
Teachers:		52
Primary	26	
Intermediate	16	
Secondary	10	
Teacher Aides		55
School-Community Workers		23
State Department Members and Visitors		15
TOTAL		161

Of the 123 administrators, teachers, and aides who were in attendance, 111 (90%) completed evaluation forms. The results of the participant evaluation of the Follow-up Workshop are contained in the following paragraphs.

Participants were asked to rate the workshop in terms of how valuable they felt it was for them. As may be seen below, participants were quite enthusiastic about the workshop and

Overall Workshop Rating	
Very Valuable	33 (30%)
Valuable	78 (70%)
Not Valuable	0 (—)

believed that the learning experiences added much to their ability to work with migrant children.

Participants were also asked to rate the large and small group sessions that were a part of the workshop. As may be seen, participants indicated that they found the small group format

Large Group Session Rating	
Very Valuable	33 (30%)
Valuable	70 (63%)
Not Valuable	8 (7%)

Small Group Sessions Rating	
Very Valuable	57 (52%)
Valuable	52 (46%)
Not Valuable	2 (2%)

(with its easy interchange among all participants) to be more valuable.

When participants were asked to rate the adequacy of the facilities that were used for the workshop, the majority indicated that they felt they were adequate as may be seen below.

Workshop Facilities Rating

Adequate	94 (85%)
Not Adequate	17 (15%)

Finally, participants were asked whether they would attend another Follow-up Workshop next year. That an overwhelming majority indicated that they would attend is an indication of the level of participant satisfaction with the Workshop.

Would Attend Another Follow-up Workshop

Yes	91 (82%)
No	6 (5%)
Undecided	14 (13%)

Participant Comments

Participants were given the opportunity to comment on the strengths and weaknesses of the Follow-up Workshop. A few of the comments made have been included to provide an overview of participant reactions.

"Make the Workshop last a little longer so people can rotate around the groups."

"We needed more time to attend all of the different groups."

"It looks like this workshop is getting bigger each year. Let's keep the smallness by getting more groups. Possibly try to divide the groups according to primary, intermediate, junior high (maybe even break the follow-up into sessions of aides sharing with aides)."

"I enjoyed this workshop. I have always felt these sharing workshops are the best."

"It was very interesting. I only wish that the teacher that I work with would have been here."

"The informal atmosphere of the sessions provided for good, free discussions."

"The workshops were really helpful. I just wish all of the aides from our school could have been here and that I could have been in every group instead of just one."

APPENDIX C

EVALUATION

EIGHTH ANNUAL

MIGRANT CHILD TEACHER AND AIDE INSTITUTE

SUMMER 1977

Carolyn Warner, Superintendent
Arizona Department of Education

Director, Migrant Child Education
Dr. J. O. "Rocky" Maynes, Jr.

EIGHTH ANNUAL
MIGRANT CHILD TEACHER AND AIDE INSTITUTE

RDG 594 Workshop:	Migrant Education Institute — Teachers Three Weeks, Three Hours Graduate Credit ASU, Tempe, Arizona
RDG 494 Workshop:	Migrant Aide Training Program Two Weeks, Two Hours Undergraduate Credit, ASU, Tempe, Arizona
Sponsored by:	Carolyn Warner, Superintendent Arizona Department of Education
Administrative Director:	Dr. J. O. "Rocky" Maynes, Jr. Director of Migrant Child Education, Arizona Department of Education
Administrative Consultants:	Mr. Donald Brink Mr. Gilbert Garcia Mr. William Padilla Migrant Child Education Arizona Department of Education
Program Director:	Dr. Nicholas J. Silvaroli Director of Reading Education Arizona State University
Teacher Aide Program:	Dr. Warren H. Wheelock Director, Reading Clinic University of Missouri at Kansas City

The Migrant Child Teacher and Aide Institute has been a part of the Arizona Migrant Education Program since 1970. Since its inception, over 200 teachers and 100 aides have been introduced to new curriculum concepts in the areas of:

- Oral language development
- Reading
- Individualized instruction
- Mathematics

Each teacher and aide was jointly selected by the building principal, school superintendent, and the State Director of Migrant Education. The principal or superintendent recommended the institute participant because he believed that this person will return in the fall and implement many of the recommended changes. Such implementation might take the form of teachers training other teachers, creating demonstration classrooms, recommending specific instructional materials, and aides serving in an instructional capacity. In summary, the major goal was to encourage each participant to attempt changes in the instructional situation.

Since 1971, the Migrant Child Division has sponsored a companion project called the Arizona Migrant Child Education Laboratory (AMCEL). This project provides consultants in oral language, reading, and individualized instruction to work with institute participants during the academic year. In addition, in the fall, AMCEL provides a follow-up workshop for all institute participants which affords them the opportunity to share their instructional practices. It is hoped that these coordinated

programs will bring about significant changes in the curriculum of migrant children.

TEACHER EVALUATION

Location and Facilities

Two weeks at ASU	23 continue	1 change
Last week in Somerton	22 continue	2 change
Rooms for Workshop Meetings	24 adequate	0 not adequate
Daily time schedule	22 adequate	2 not adequate

Workshop Content	Helpful	Not Helpful
Basic Teacher Skills—Reading	24	0
Basic Teacher Skills—Oral Language	17	7
Oral Language Evaluation (OLE)	22	7
Classroom Reading Inventory (CRI)	24	0
Interest Centers	22	2
Units/Themes	24	0
Individual Conferences with recordkeeping	17	7
Math	20	4
Teacher Aide Utilization	12	12

Consultants	High	Average	Low
Dr. Searfoss (Reading)	22	2	0
Dr. Bitter (Math)	17	5	1
Dr. Barkin (Teacher Aide)	14	8	1
Dr. Silvaroli (Director)	21	3	0

General	Continue	Change
Joint meeting with administrators and participants	15	9
Joint meeting with teachers and teacher aides	20	4
Social activities	21	3

TEACHER EVALUATION (Cont.)

Teacher ratings of knowledge and ability before and after the Summer Institute.

	Pre-Institute			Post-Institute		
	(high)		(low)	(high)		(low)
Knowledge of word recognition skills	6	13	5	21	3	0
Knowledge of comprehension skills	5	14	5	17	5	2
Ability to administer OLE Test	1	1	22	19	4	1
Ability to administer Classroom Reading Inventory (CRI)	3	9	12	20	4	0
Understanding of Emerging Classroom	5	8	11	18	5	1
Ability to develop a unit	10	9	5	17	5	2
General understanding of Migrant Education at State level	1	5	18	13	10	1

Participant Comments

"Try to get all administrators to attend."

"Have more joint meetings with teachers and aides."

"Needs more interaction between teachers and administrators."

"I've had an opportunity to think through my own ideas in teaching. Through group participation and discussion I've either solidified or modified my thoughts into a better thought-through plan of teaching. The opportunity to observe other teachers is a bonus."

"Probably the best education class I've ever had."

"This workshop has me all fired up!! I can barely wait to meet my students this fall. My teaching will be 100% more enthusiastic as a result of the workshop."

"The entire workshop was well planned and carried out. It was extremely helpful to me and I hope to implement many of the suggestions.

TEACHER AIDE EVALUATION

Location and Facilities

Last week in Somerton	27 continue	3 change
Rooms for workshop meetings	29 adequate	1 not adequate
Daily time schedule	25 adequate	5 not adequate

Workshop Content	Helpful	Not Helpful
Basic Skills-Oral Language	30	0
Basic Skills-Decoding	30	0
Basic Skills of Comprehension	29	1
Oral Language Evaluation	30	0
Interest Inventory	30	0
Classroom Reading Inventory	30	0
Teaching Techniques and Planning	30	0
Language Experience Approach	30	0
Materials and Games	30	0
Handouts	29	1

Consultants	High	Average	Low
Sr. Noreena Carr	28	2	0
Dr. Wheelock	25	3	2

General	Continue	Change
Joint Meeting with Teachers and Teacher Aides	26	4
Social Activities	23	7

Aide ratings of knowledge and ability before and after the Summer Institute.

	Pre-Institute			Post-Institute		
	(high)		(low)	(high)		(low)
Knowledge of word recognition skills	8	15	7	25	3	2
Knowledge of comprehension skills	6	19	5	24	4	2
Knowledge of OLE Test	6	7	17	27	2	1
Knowledge of CRI	5	7	18	20	8	2
Ability to use an Interest Inventory	9	12	9	27	2	1
Ability to plan a lesson	10	11	9	24	6	0
Ability to use instructional materials	11	14	5	28	2	0

Participant Comments

"Wish we would have had more time to observe classrooms."

"More time is needed for materials and games."

"More meetings with teachers and aides."

"The practice really helped familiarize me with the tests."

"Teachers and aides should meet together more because I feel that they need to get to know each other and become friends so that they can be more cooperative with each other."

"I would liked to have had more time for observing classes. I would have liked to have made some home visits. More interaction with children and Somerton teachers would have been helpful."

This report was prepared for the Arizona Migrant Education Program by D. A. LEWIS ASSOCIATES, INC., a Washington, D. C.-based research, consulting, and publishing company. The firm has performed client assignments for federal agencies, over twenty states, and private organizations, including such research as comprehensive needs assessments for migrant education in two states, analysis of the movements of migrant pupils for five states, evaluation of the educational and economic impact of preschool day care centers, two separate benefits analyses of the Migrant Student Record Transfer System, and assessment of the functioning of migrant health programs. In addition to its research activities, the firm has developed manuals and other publications, including The Migrant Educator, the national news publication for educators of migrant children.

The principal author of this report is BENJAMIN G. DAVIS, Director of Evaluation and Economic Studies for D. A. Lewis Associates, Inc. Mr. Davis has an extensive background in economic analysis and social program evaluation. His professional specialty is in the economics of human resources with experience in the areas of educational program evaluation, manpower projections and analyses, cost-effectiveness analysis, and survey design and validation. In addition to the present volume, Mr. Davis has authored publications for the United Nations; the National Center for Educational Statistics, USOE; and the Federal Technical Assistance Team.